

What is claimed is:

1. A peptide comprising a portion of a protein selected from the group consisting of plasminogen, endostatin, VEGF, FLT-1 and KDR/FLK-1, wherein said peptide is of length from 7-20 amino acids long and wherein said peptide exhibits an  $IC_{50}$  of 20  $\mu$ M or less in a bovine aorta endothelial cell proliferation assay or exhibits inhibition of angiogenesis in a chick chorioallantoic membrane assay of at least 30% at a dose of 50  $\mu$ g/cover slip.

2. The peptide of claim 1 that exhibits an  $IC_{50}$  of 20 nM to 20 mM in a bovine aorta endothelial cell assay or exhibits inhibition of angiogenesis in a chick chorioallantoic membrane assay of at least 50% at a dose of 10 to 25  $\mu$ g/cover slip.

3. The peptide of claim 1, comprising a portion of a kringle domain of plasminogen.

4. The peptide of claim 3, wherein said portion of a kringle domain is represented by residues 27-41 of a kringle domain of human or mouse plasminogen.

5. The peptide of claim 3, wherein said portion of a kringle domain is represented by residues 29-38 or residues 29-39 of a plasminogen.

6. The peptide of claim 1 that lacks any cysteine or if it contains any cysteine, the cysteine is blocked to prevent disulfide formation.

7. The peptide of claim 1 that is derived from endostatin, VEGF, FLT-1 and KDR/FLK-1 and has a length of from 9 to 20 amino acids long.

8. The peptide of claim 7 that lacks any cysteine or if it contains any cysteine, the cysteine is blocked to prevent disulfide formation.

9. The peptide of claim 1, comprising a peptide having an amino acid sequence selected from the group consisting of SEQ. ID. NOs. 1-3, 11-33, 35-38, 40-41 and 44-50.

10. The peptide of claim 1, comprising a peptide having an amino acid sequence selected from the group consisting of SEQ. ID. NOs. 1-3, 11, 12, 29-36 and 38-39.

11. The peptide of claim 1, comprising a peptide having an amino acid sequence selected from the group consisting of SEQ ID NOs: 36-46.

12. The peptide of claim 1, comprising a peptide having an amino acid sequence selected from the group consisting of SEQ. ID. NOs. 37 and 40-41.

13. A pharmaceutical composition comprising a peptide according to claim 1 and a pharmaceutically acceptable carrier.

14. The composition according to claim 13, wherein said composition provides a unit dose of from 20 µg/kg/day to 2 mg/kg/day.

15. A pharmaceutical composition comprising at least one peptide according to claim 11 and a pharmaceutically acceptable carrier.

16. The composition according to claim 15, wherein said composition provides a unit dose of from 20 mg/kg/day to 2 mg/kg/day.

17. A pharmaceutical composition comprising at least one peptide according to claim 12 and a pharmaceutically acceptable carrier.

18. The composition according to claim 17, wherein said composition provides a unit dose of from 20 mg/kg/day to 2 mg/kg/day.

19. A method for preventing or treating undesired angiogenesis comprising administering to a subject at risk for or presenting undesired angiogenesis an effective amount of the composition of claim 13 to a subject.

20. A method for preventing or treating undesired angiogenesis comprising administering to a subject at risk for or presenting undesired angiogenesis an effective amount of the composition of claim 15 to a subject.

21. A method for preventing or treating undesired angiogenesis comprising administering to a subject at risk for or presenting undesired angiogenesis an effective amount of the composition of claim 17 to a subject.

22. A method for preventing or treating primary tumor growth or metastasis comprising administering to a subject at risk for or presenting a tumor an effective amount of the composition of claim 13.

23. A method for preventing or treating primary tumor growth or metastasis comprising administering the composition of claim 15 to a subject at risk for or presenting a tumor.

24. A method for preventing or treating primary tumor growth or metastasis comprising administering to a subject at risk for or presenting a tumor an effective amount of the composition of claim 17.